Appendix C: Simple Soil Survey - Key

Abundance Consulting "Quick And Dirty" Soil Quality Assessment September 19, 2008

Old Poor Farm Seminar Series, Washington State University Extension 1919 NE 78th Street

SAMPLE ID:

INDICATOR:	Method	Quality:	Good	Fair	Poor
Soil Tilth, ~ Test while Moist- not dry, not wet.	~Dig in slightly with trowel, gather a handful of soil. If you can, its likely good or fair. if you cant, its likely poor.		Friable, Pliable, crumbly, easily broken by fingers, structure/texture variable, visible pores	Firm, effort required to break clods, structure and texture variable, some pores	Hard, Dense, difficult to break, homogeneous Structure, lacks complex texture, no pores
Compaction ~Test when moist	~poke pencil sized stick into ground		Soil probe (pencil, etc) slides in easily to 4+"	Soil probe requires some effort to sink 2" to 4"	soil probe requires great effort for little penetration, potential to break pencil
Water Infiltration and Drainage ~Test when wet	~Observe after rain or use sprinkler, model 1/2" 'rain' in 4 hours		Drains readily, no pooling, "Sheen' effect last 3-5 seconds,	Drains well, little pooling, limited persistence (less than 1 hour) I, "Sheen" effect lasts 4-8 seconds	Drains poorly, Pooling and ponding develops and persists, "Sheen" effect 10+ seconds
Erosion ~Test when wet, observe anytime	~Observe after rain or use sprinkler, model 1/2" 'rain' in 4 hours		no sheet and rill, downslope discharge clear, topsoil present, robust, High Organic content	minor sheet and rill, turbidity (clouds) present in discharge, topsoil present, weak, medium, low organic content	sheet and rill and perhaps gully evidence, muddy runoff, topsoil often depleted, subsoil visible
Ground Cover ~Observe anytime	~Observe plant and soil matrix		Little or no bare soil, vegetation annualized, vegetative compost and humus persistent and dense but friable, giving	Soil covered patchily, vegetation spotty,vegetative compost and humus variable, from good to poor	soil bare, humus lacking or not present, no vegetative compost or humus
Soil Food Web ~Observe anytime	~Observe plant and soil matrix, dig in 3-5".		Clear signs of earthworms (holes, castings), spiders, beetles, decomposing roots, rich earthy smell	Some sign of earthworms, egg sacs, spiders, etc. Soil smell weak	Little or no sign of earthworms, beetles, decomposing roots; soil may have no or 'dusty' smell
Organic Content ~Observe anytime	~Observe soil matrix, dig in 3- 5".		Dark soil, visible decomposing root/leaf mulch, rich earthy smell, visibly active soil food web	Medium dark or brown soil, limited visible decomposing root/leaf mulch, weakly earthy smell, limited soil food web visibility	Light colored soil, virtually no visible decomposing root or leaf mulch, dusty or dry smell, no visibly active soil food web
Plant Productivity ~Observe during growing season	~Watch through growing season		Uniform and healthy production for species morphology, good crop volume, resistant to disease, stress	Mostly uniform and healthy production for species morphology, fair crop volume, somewhat resistant to disease, stress	Variable, tending to unhealthy species morphology, poor crop volume, not resistant to disease, stress

Appendix C: Simple Soil Survey

Sites	Soil Tilth	Compaction	Water	Erosion	Ground Cover	Soil Food Web	Organic Content	Plant Productivity
A1	good	fair	fair	good	good	good	good	fair
A2	fair	fair	fair	fair	good	fair	poor	poor
A3	poor	fair	fair	fair	good/fair	fair	poor	fair
A4	fair	poor	fair	fair	good	good	fair	good
A5	good/fair	poor	good	good	good	good	fair	good
A6	poor	poor	poor	poor	poor	poor	poor	Х
A7	fair	fair	fair	fair	good	fair	fair	Х
A8	good	poor	good	good	good	poor	poor	poor
A9	good	fair	fair	good	fair	fair	poor	fair
A10	poor	poor	Χ	good	fair	poor	poor	poor
A11	good	fair	fair	good	good	good	fair	X
A12	good	good	good	fair	good	good/fair	fair	fair
A13								
B1	good	fair	fair	good	good	good	fair	fair
B2	good	good	good	good	fair	fair	fair	good/fair
B3								
B4	good	fair	good	good	good	good	good	fair
B5	good	good	good	good	good	good	good	good
B6	fair	fair/ppor	fair	good	poor	poor	fair/poor	fair
B6#2	fair	poor	poor	fair	fair	fair	fair	fair
В7								

Prepared for Clark County By Abundance Consulting January 21, 2008

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C'I	C TTUL C			Ground		od Organ		,	0 11 4	
Sites	Soil Tilth Compa	iction Water	Erosior	n Cover	Web	Conte	nt Product	ivity	Overall A	verage
A1	5	3	3	5	5	5	5	3	4.25	
A2	3	3	3	3	5	3	1	1	2.75	
A3	1	3	3	3	4	3	1	3	2.63	
A4	3	1	3	3	5	5	3	5	3.5	
A5	4	1	5	5	5	5	3	5	4.13	
A6	1	1	1	1	1	1	1 x		1	
A7	3	3	3	3	5	3	3 x		3.29	
A8	5	1	5	5	5	1	1	1	3	
A9	5	3	3	5	3	3	1	3	3.25	
A10	1	1 x		5	3	1	1	1	1.86	
A11	5	3	3	5	5	5	3 x		4.14	
A12	5	5	5	3	5	4	3	3	4.13	
A13									0	
										3.16
B1	5	3	3	5	5	5	3	3	4	
B2	5	5	5	5	3	3	3	4	4.13	
B3									0	
B4	5	3	5	5	5	5	5	3	4.5	
B5	5	5	5	5	5	5	5	5	5	
B6	3	2	3	5	1	1	2	3	2.5	
B6#2	3	1	1	3	3	3	3	3	2.5	
В7									0	4.03